



CITY OF DURHAM | NORTH CAROLINA

Date: May 17, 2011

To: Thomas J. Bonfield, City Manager

Through: Theodore L. Voorhees, Deputy City Manager

From: Joel V. Reitzer, Jr., Director, General Services Department
John P. Gregory, Assistant Director, General Services Department
Doreen Sanfelici, Project Management Team Leader
Donna G. Maskill, PE, Construction Project Manager

Subject: Radio Operations Building - IBI Group of North Carolina, PC,
Professional Services Contract

Executive Summary

In FY 2008-2009, the City Council approved Capital Improvements Program (CIP) project funding in the amount of \$350,000.00 for the design and construction of a new Camden Avenue Radio Operations Building to replace the two modular buildings currently in use at 1807 Camden Avenue. A separate CIP project, the Microwave Radio Network Upgrade project, was funded in FY 2009-2010. After changes to the statewide contract and competitive bidding, the Microwave Radio Network Upgrade project realized substantial savings. It was determined that the Microwave Radio Network project savings may supplement funding to the new Radio Operations Building project as existing funds were insufficient to complete design and construction. In September 2010, City Council approved a transfer of \$500,000.00 in excess funding from the Microwave Radio Network Upgrade project to the Radio Operations Building project.

The Radio Operations Building project consists of the design and construction of a new, fenced-in, single-story building constructed to R-56 Electrical Standards for Radio Operations to house new public safety microwave communications radio equipment. The building is required to have HVAC with 100% redundancy and a back-up generator with sufficient capacity for all communications equipment and building systems to maintain operations during an emergency or power outage. The City of Durham and Durham County plan to migrate to a total digital radio system, with funding forecasted in FY 2013-2014. The current radio communications system will remain in place in the existing facility until the new equipment is placed in service. Construction for the new building will be in 2012. The new building will be 2,500 SF, and will include a 40' x 40' equipment bay, 300 SF workroom and unisex restroom. The project also includes extension of water and sewer service to the new building and upgrades to the existing communication tower's grounding system, if needed.

In November 2010, staff selected IBI Group of North Carolina, Inc. (IBI Group) of Raleigh, NC, through a Request for Qualifications (RFQ) process, as the best qualified, most responsive company to perform architectural and engineering design services for the project. This agenda item requests City Council approval for full design services with IBI Group to produce design and construction documents and provide construction administration for the Radio Operations Building.

Recommendation

The Department of General Services recommends that the City Council:

1. Authorize the City Manager to execute the IBI Group of North Carolina, PC Professional Services Contract in an amount not to exceed \$147,305.00; and
2. Establish a design contingency in the amount of \$15,000.00, and authorize the City Manager to negotiate and execute change orders to the IBI Group of North Carolina, PC Professional Services Contract, provided the total cost does not exceed \$162,305.00.

Background

The City must maintain the radio system to a high level of reliability and readiness due to its vital role in public safety. This project has a significant impact in maintaining this public safety expectation. The new Radio Operations Building will house the new total digital radio system equipment, planned for purchase in FY 2013-14. The move to a total digital system is a critical element in the City's mission to provide public safety. The existing equipment, originally installed in 1994, lacks current technological advantages and is difficult to continue to support. The funding of the new total digital system will be a joint venture between the City of Durham and Durham County.

The City purchased and installed two modular buildings at the Camden Avenue Tower site - one in the early 1980s and the other in 1994. Both structures are modular buildings and are near the end of their useful life cycle and will soon need replacement. The General Services Department initially made a CIP request for a new building project to replace these failing structures in 2005. In 2008, Council approved \$350,000 for a new building to replace these modular buildings. In 2010, Council approved \$500,000 in additional funding for the project. The new building will be on site construction rather than modular and should have a long useful life cycle.

The Fleet Management and Communications Maintenance Department maintains a high level of compliance in emergency communications. The department provides 24/7 support to the emergency communications system which includes 3500 radios, 4 tower sites, the 911 center and backup center.

Issues/Analysis

The new radio system equipment will require unique design and construction elements to ensure the equipment is secure and protected from interruption in service. Additionally, greater electrical requirements for the new equipment will mean that the project will require a much larger emergency generator. In order for the City of Durham and Durham County to continue to provide a high level of service with regard to public safety, and because of the limited remaining

service life of the current modular buildings, the City will need a site-built, masonry structure meeting the HVAC and electrical redundancy requirements for digital radio system equipment.

Alternatives

An alternative is to not proceed with the new Radio Operations Building. Staff recommends against this alternative as existing financial sources have been identified to fully fund this project. Not proceeding with this project may also negatively impact operational and planning goals for the Durham Public Protection total digital system upgrade scheduled for 2013-2014 and potentially diminish services to citizens.

Financial Impacts

Project Funding Sources:

Certificates of Participation (2008/09 CIP) 3505K908–CC310	\$ 350,000.00
2009 LOBS 3505K950 – CC310 (ordinance #14051)	\$ 500,000.00
<hr/> Total appropriated funds	<hr/> \$ 850,000.00

Funding Uses Summary:

Design	
Design Services	\$147,305.00
Design Contingency	\$ 15,000.00
<hr/> SubTotal Design Services	<hr/> \$162,305.00
Other Owner's Expenses	\$ 27,695.00
Construction Budget	\$ 600,000.00
Construction Contingency	\$ 60,000.00
<hr/> Total Project Budget	<hr/> \$ 850,000.00

SDBE Summary

The Equal Opportunity/Equity Assurance Department reviewed the proposal submitted by IBI Group of North Carolina, PC of Raleigh, North Carolina to determine compliance with the Ordinance to Promote Equal Business Opportunities in City Contracting. It was determined that IBI Group of North Carolina, PC was in compliance with the Ordinance to Promote Equal Business Opportunities in City Contracting.

SDBE REQUIREMENTS

No MSDBE or WSDBE goals were set.

IBI Group of North Carolina, PC will subcontract to the following certified firm:

Firm	ID	City/State	Amount	% of Contract
CH Engineering, PLLC	WSDBE	Raleigh, NC	\$34,420	23.3%

WORKFORCE STATISTICS

Workforce statistics for IBI Group of North Carolina, PC are as follows:

Total Workforce	18	
Total Females	5	(28%)
Total Males	13	(72%)
Black Males	0	(0%)
White Males	12	(66%)
Other Males	1	(6%)
Black Females	1	(6%)
White Females	2	(11%)
Other Females	2	(11%)